



Ersa MOBILE SCOPE – camera units with lenses, desktop holder and focusing stand

Unique Technology Advantages:	
■	Modular system for flexible use
■	High-resolution USB camera
■	Exchangeable high-quality lenses
■	Stand with fine adjustment
■	Completely ESD safe
■	ImageDoc Basic software package

### Ersa MOBILE SCOPE – solder joint inspection in the twinkling of an eye

The Ersa MOBILE SCOPE is a compact and handy, portable video microscope to inspect solder joints in electronic production environments. The device has been designed for optical inspection and digital image recording including measurements of solder joints on Ball Grid Array (BGA),  $\mu$ BGA, CSP and Flip-Chip packages. The Ersa MOBILE SCOPE is suitable to inspect PCB lands, solder paste prints or in general for the optical inspection of components on printed circuit boards in Surface Mount Technology (SMT) or in Trough Hole Technology (THT). The device can be used in quality control, production, laboratories or R&D departments.

The compact Ersa MOBILE SCOPE connects with a PC or any portable computer via an USB interface and is ready for operation within minutes in any location. By means of the high-quality BGA optical head, components with hidden

solder joints can easily be inspected, a Macro-Zoom lens allows topview surface inspection in various magnifications. Both optical heads are plugged onto the high-resolution digital colour camera hand piece with a „Quick Snap“ connection. Changing the optical heads in accordance to the inspection task is a matter of seconds.

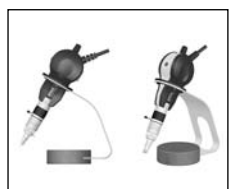
Long-life and very bright controllable LED lights are integrated in both optical heads and provide optimal illumination of the solder joints. In BGA inspection an additional LED brush light is essential for backlight illumination or to light up very hidden and hard to reach areas. Soldering errors can be detected quickly and easily with the Ersa MOBILE SCOPE. The included and established ImageDoc inspection software not only displays the live images but also offers the operator various possibilities for documentation and analyzation of the inspection results.

Extensive accessories allow the operator to compose his individual Ersa MOBILE SCOPE inspection system according to his needs.

The practical aluminium case for the Ersa MOBILE SCOPE offers safe storage of the inspection items and transportation of the system to any location wherever it is needed.



Inspection of a micro-BGA



Desktop holder for Ersa MOBILE SCOPE



Focusing stand (0VSS065) with Ersa MOBILE SCOPE



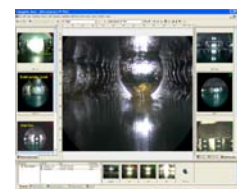
Focusing stand (0VSS060) & LED brush light stand



X-Y table



Foot switch for triggering image



ImageDoc (inspection software)

## Mobile optical inspection system

## Technical data Ersa MOBILE SCOPE

Basic camera unit		Description
 0VSCA060	Image sensor	1/3.2" N-MOS solid state color image sensor
	Number of effective pixels	1600 (H) x 1200 (V) pixels (UXGA / 2.0 MP)
	Interface	USB 2.0 serial bus
	Dimensions	114 (L) x 36 (W) x 51 (H) mm (without cable)
BGA Lens, 90° Optical Head		Description
 0VSSE060-90K	On screen magnification	~ 180x – 15x on 14" monitor
	Working distance range	~ 0.5 – 30 mm (focusing range)
	Field of view	~ 2.0 – 24 mm
	Illumination	Integrated long-life cool white LED illumination
	Size of the optical head tip	8.2 x 2.2 mm (W x D)
	Foot print of optical head tip	8.2 x 0.8 mm (W x D)
Dimensions	83 (L) x 20 (Ø) mm (max. 83 x 30 mm incl. focus position adjustment pin)	
Macro-Zoom 80x with built-in LED light		Description
 0VSSE060-MZ80	On screen magnification	~ 80x – 8x on 14" monitor
	Working distance range	~ 5 – 200 mm
	Field of view	~ 5 – 45 mm
	Illumination	Integrated long-life cool white LED illumination
	Dimensions	43 (L) x 19 (Ø) mm (85 x 35 mm max. incl. telescopic stabilizer).
LED brush light		Description
 0VSL030	Lamp type	Cool white power LED
	Illumination output	64 x 0.250 mm (Ø) plastic optical grade fibres
	Power source	3 x AA size batteries (Alkaline is recommended)
	Dimensions	Ø 26 x 250 mm (max. 40 x 250 mm)

## Ersa MOBILE SCOPE sale sets

Content	Order number	0VSSC060VK1	0VSSC060VK2	0VSSC060VK3
Basic camera unit, digital		1x	1x	1x
BGA lens, 90° optical head		1x	--	1x
Macro-Zoom 80x with LED light		--	1x	1x
LED brush light with dimmer		1x	--	1x
Desktop holder for camera unit		1x	--	1x
Operating manual		1x	1x	1x
ImageDoc Basic (inspection software)		1x	1x	1x
Aluminium case for Ersa MOBILE SCOPE		--	--	1x

## Accessory Ersa MOBILE SCOPE

Product name	Order number
Focusing stand, coarse/fine movement	0VSST060
Focusing stand – Recommended for BGA inspection!	0VSST065
X-Y table	0VSXY060
Stand for LED brush light	0VSL030H
Foot switch for triggering image - with USB connection	0VSCA060FS
Ersa lens cleaning kit	0VSLC100
Aluminium case for Ersa MOBILE SCOPE	3VP00703

0813 • subject to changes • © by Ersa GmbH